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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,241	11/19/2001	Toni Paila	004770.00026	8406

22908 7590 06/03/2005

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EXAMINER	
WEST, LEWIS G	
ART UNIT	**PAPER NUMBER**
2682	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/988,241	PAILA ET AL.	
	Examiner	Art Unit	
	Lewis G. West	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. The affidavit filed on June 2, 2004 under 37 CFR 1.131 is sufficient to overcome the Chen reference.

Response to Arguments

2. Applicant's arguments with respect to claims 1-47 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 9-10, 12-15,18-19, 23-26, 29-30, 34, 37-40, 43 and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Leung (2002/0142757)

Regarding claim 1, Leung discloses a method for performing multicast session handover, comprising the steps of

(i) in a first cell, receiving from a base station corresponding to a first cell, a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and a second cell; (0058-0059)

(ii) tuning to a multicast session in the first cell using the received multicast session information; (0059)

(iii) when a predetermined condition occurs, tuning to the multicast session in the second cell using the received multicast session information. (0050)

Regarding claim 2, Leung discloses a computer readable medium, wherein the multicast session information comprises a session identifier and a list of channels in which the multicast session is available. (0059)

Regarding claim 3, Leung discloses method of claim 1, wherein, in step (i), each multicast session information comprises a frequency. (0059)

Regarding claim 4, Leung discloses the method of claim wherein the multicast session information comprises a session title. (0089)

Regarding claim 9, Leung discloses a method for performing multicast session handover, comprising the steps of (i) in a first cell, receiving from a base station corresponding to a first cell, a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and a second cell; (0058-0059)

(ii) tuning to a multicast session in the first cell using the received multicast session information; (0059)

(iii) when a predetermined condition occurs, tuning to the multicast session in the second cell using the received multicast session information, wherein, in step (i), the multicast session information comprises link-level access parameters corresponding to the first and second cells, wherein steps (ii) and (iii) comprise using the link-level access parameters to tune to the multicast session in each cell. (0050, 0059, 0087-0088)

Regarding claim 10, Leung discloses the method of claim 1 further comprising the step of joining an IP multicast group in the first cell. (0058-0059)

Regarding claim 12, Leung discloses a mobile terminal, comprising: a processor; and memory for storing computer readable instructions that, when executed by the processor, cause the mobile terminal to perform steps of: (i) in a first cell, receiving from a base station corresponding to a first cell, a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and a second cell; (0058) (ii) tuning to a multicast session in the first cell using the received multicast session information; (0059) (iii) when a predetermined condition occurs, tuning to the multicast session in the second cell using the received multicast session information. (0050,0087-0088)

Regarding claim 13, Leung discloses the method of claim 12 wherein the multicast session information comprises a session identifier and a list of channels in which the multicast session is available. (0059)

Regarding claim 14, Leung discloses the mobile terminal of claim 12, wherein, in step (i), each multicast session information comprises a frequency. (0059)

Regarding claim 15, Leung discloses the method of claim 13 wherein the multicast session information comprises a session title. (0089)

Regarding claim 18, Leung discloses the mobile terminal of claim 12, wherein, in step (i), the multicast session information comprises link-level access parameters corresponding to the first and second cells, and wherein steps (ii) and (iii) comprise using the link-level access parameters to tune to the multicast session in each cell. (0059)

Regarding claim 19, Leung discloses the mobile terminal of claim 12, wherein the computer readable instructions further comprise the step of joining an IP multicast group in the first cell. (0058-0059)

Regarding claim 23, Leung discloses a computer readable medium storing computer readable instructions that, when executed by a processor, cause a data processing device to perform the steps of

(i) in a first cell, receiving from a base station corresponding to a first cell, a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and a second cell; (0058-0059)

(ii) tuning to a multicast session in the first cell using the received multicast session information; (0059)

(iii) when a predetermined condition occurs, tuning to the multicast session in the second cell using the received multicast session information. (0050, 0087-0088)

Regarding claim 24, Leung discloses the method of claim 23, wherein the multicast session information comprises a session identifier and a list of channels in which the multicast session is available. (0089)

Regarding claim 25, Leung discloses the computer readable medium of claim 23, wherein, in step (i), each multicast session information comprises a frequency. (0059)

Regarding claim 26, Leung discloses the method of claim 23, wherein the multicast session information comprises a session title. (0059)

Regarding claim 29, discloses the computer readable medium of claim 23, wherein, in step (i), the multicast session information comprises link-level access parameters corresponding to the first and second cells, and wherein steps (ii) and (iii) comprise using the link-level access parameters to tune to the multicast session in each cell. (0059)

Regarding claim 30, Leung discloses the method of claim 1, wherein the computer readable instructions further comprise the step of joining an IP multicast group in the first cell. (0058-0059)

Regarding claim 34, Leung discloses a method for performing multicast session handover, comprising steps of:

(i) tuning to a logical announcement channel; (0059)

(ii) receiving a session announcement corresponding to a multicast session, the session announcement comprising information that maps link-level access parameters in each of a plurality of cells to the multicast session. (0058-0059)

(iii) receiving the multicast session in a first cell using the first cell's received link level access parameters; (0059) and;

(iv) when reception of the multicast session in the first cell changes from a first signal strength, receiving the multicast session in a second cell using link-level access parameters contained in the session announcement. (0050,0087-88)

Regarding claim 37, Leung discloses a mobile terminal, comprising: a processor; and memory for storing computer readable instructions that, when executed by the processor, cause the mobile terminal to perform steps of: (i) wirelessly receiving from a base station corresponding to a first cell, a broadcast message communicating multicast session information for the first cell and multicast information for a second cell; (0058-0059) (ii) wirelessly tuning to a multicast session broadcast by the base station corresponding to the first cell using the received multicast session information for the first cell; (0059) (iii) when a predetermined condition occurs, wirelessly tuning to a corresponding multicast session broadcast by a base station

corresponding to the second cell using the received multicast session information for the second cell. (0050, 0087-88)

Regarding claim 38, Leung discloses the terminal of claim 1, wherein each multicast session information comprises a session identifier and a list of channels in which the multicast session is available. (0059)

Regarding claim 39, Leung discloses the mobile terminal of claim 37, wherein, in step (i), each multicast session information comprises a frequency. (0059)

Regarding claim 40, Leung discloses a mobile terminal of claim 37, wherein, each multicast session information comprises a session title. (0089)

Regarding claim 43, Leung discloses the mobile terminal of claim 37, wherein, in step (i), each multicast session information comprises link-level access parameters to tune to the multicast session in each respective cell. (0059)

Regarding claim 47, Leung discloses a method for performing multicast session handover, comprising, prior to determining that a handoff from a first cell to a second cell should be made for a mobile terminal located in the first cell, transmitting from a base station corresponding to the first cell a broadcast message communicating multicast session information for a plurality of cells comprising the first cell and the second cell. (0087-0088)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 5-6, 11, 20-22, 31-33 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung in view of McCormick (US 6,519,455).

Regarding claim 5, Leung discloses method of claim 1, but does not expressly disclose handoff due to signal fading. McCormick wherein a predetermined condition for broadcast handoff comprises a signal strength fading. (Col. 7 line 17-36; Col. 8 lines 5-32). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to change base stations when a signal fades in order to continue a session without it being interrupted or dropped due to loss of signal.

Regarding claim 6, Leung discloses the computer readable medium of claim 1, but does not disclose that a predetermined condition comprises receiving predetermined user input. McCormick discloses a mobile terminal, wherein a predetermined condition comprises receiving predetermined user input. (Col. 6 lines 17-29) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to handoff based on user input to give a user more control in system selection.

Regarding claim 11, Leung discloses the method of claim 1, but does not expressly disclose periodic broadcast while tuned to the first session. McCormick discloses a system wherein the computer readable instructions further comprise the step of periodically receiving session announcements while tuned to the session in the first cell. (Col. 5 line 36-62) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to periodically receive multicast session announcements while tuned to the multicast session in the first cell in order to inform the users of other broadcasts or new broadcast that become available.

Regarding claim 20, Leung discloses the mobile terminal of claim 12, but does not expressly disclose periodic broadcast while tuned to the first session. McCormick discloses a system wherein the computer readable instructions further comprise the step of periodically receiving session announcements while tuned to the session in the first cell. (Col. 5 line 36-62) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to periodically receive multicast session announcements while tuned to the multicast session in the first cell in order to inform the users of other broadcasts or new broadcast that become available.

Regarding claim 21, Leung discloses a terminal, but does not expressly disclose handoff due to signal fading. McCormick wherein a predetermined condition for broadcast handoff comprises a signal strength fading. (Col. 7 line 17-36; Col. 8 lines 5-32). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to change base stations when a signal fades in order to continue a session without it being interrupted or dropped due to loss of signal.

Regarding claim 22, Leung discloses the method of claim 12 but does not expressly disclose a predetermined user input for handover. McCormick discloses a mobile terminal, wherein a predetermined condition comprises receiving predetermined user input. (Col. 6 lines 17-29) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to handoff based on user input to give a user more control in system selection.

Regarding claim 31, Leung discloses the computer readable medium of claim 23, but does not expressly disclose periodic broadcast while tuned to the first session. McCormick discloses a system wherein the computer readable instructions further comprise the step of

periodically receiving session announcements while tuned to the session in the first cell. (Col. 5 line 36-62) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to periodically receive multicast session announcements while tuned to the multicast session in the first cell in order to inform the users of other broadcasts or new broadcast that become available.

Regarding claim 32, Leung discloses a computer readable medium, but does not expressly disclose handoff due to signal fading. McCormick wherein a predetermined condition for broadcast handoff comprises a signal strength fading. (Col. 7 line 17-36; Col. 8 lines 5-32). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to change base stations when a signal fades in order to continue a session without it being interrupted or dropped due to loss of signal.

Regarding claim 33, Leung does not expressly disclose user input for handoff. McCormick discloses a computer readable medium, wherein in step (iii) the predetermined condition comprises receiving predetermined user input. (Col. 6 lines 17-29) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to handoff based on user input to give a user more control in system selection.

Regarding claim 44, Leung discloses the mobile terminal of claim 37, but does not expressly disclose periodic broadcast while tuned to the first session. McCormick discloses a system wherein the computer readable instructions further comprise the step of periodically receiving session announcements while tuned to the session in the first cell. (Col. 5 line 36-62) Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to periodically receive multicast session announcements while tuned to the multicast

session in the first cell in order to inform the users of other broadcasts or new broadcast that become available.

Regarding claim 45, Leung discloses a terminal, but does not expressly disclose handoff due to signal fading. McCormick wherein a predetermined condition for broadcast handoff comprises a signal strength fading. (Col. 7 line 17-36; Col. 8 lines 5-32). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to change base stations when a signal fades in order to continue a session without it being interrupted or dropped due to loss of signal.

Regarding claim 46, Leung does not expressly disclose user input for handoff. McCormick discloses a computer readable medium, wherein a predetermined condition for handoff comprises receiving predetermined user input. (col. 6 lines 17-29) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to handoff based on user input to give a user more control in system selection.

7. Claims 7, 16, 27, 35 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung in view of Examiner's official notice.

Regarding claim 7, Leung discloses the method of claim 1 but does not expressly disclose that in steps (ii) and (iii) comprise receiving a digital video broadcast terrestrial (DVB-T) multicast session. Examiner takes official notice that DVB-T is a well-known and standard type of broadcast. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability.

Regarding claim 16, Leung discloses the method of claim 12 but does not expressly disclose that steps (ii) and (iii) comprise receiving a digital video broadcast terrestrial (DVB-T) multicast session. Examiner takes official notice that DVB-T is a well known and standard type of broadcast. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability. Examiner takes official notice that DVB-T is a well known and standard type of broadcast. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability.

Regarding claim 27, Leung discloses the method of claim 23 but does not expressly disclose that steps (ii) and (iii) comprise receiving a digital video broadcast terrestrial (DVB-T) multicast session Examiner takes official notice that DVB-T is a well known and standard type of broadcast. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability.

Regarding claim 35, Leung discloses the method of claim 34 but does not expressly disclose that steps (iii) and (v) comprise tuning to a digital video broadcast terrestrial (DVB-T) multicast session. Examiner takes official notice that DVB-T is a well known and standard type of broadcast. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability.

Regarding claim 41, Leung discloses the method of claim 37 but does not expressly disclose that wherein steps (ii) and (iii) comprise wirelessly receiving a digital video broadcast terrestrial (DVB-T) multicast session. Examiner takes official notice that DVB-T is a well known and standard type of broadcast. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use DVB-T as a multicast format to insure standard operation and system interoperability.

8. Claims 8, 17, 28, 36 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung in view of Das et al.

Regarding claim 8, Leung discloses the method of claim 1, wherein steps (ii) and (iii) comprise receiving a multicast session, but does not disclose UMTS. Das discloses a system with multicast handover that may be implemented in UMTS. (Paragraphs 0004, 0012) Therefore it would have bee obvious to one or ordinary skill in the art to implement a multicast handover method using UMTS, as UMTS is well known to be a developing standard that will support multimedia applications where multicast will be used.

Regarding claim 17, Leung discloses the mobile terminal of claim 12, wherein steps (ii) and (iii) comprise receiving a multicast session, but does not disclose UMTS. Das discloses a system with multicast handover that may be implemented in UMTS. (Paragraphs 0004, 0012) Therefore it would have bee obvious to one or ordinary skill in the art to implement a multicast handover method using UMTS, as UMTS is well known to be a developing standard that will support multimedia applications where multicast will be used.

Regarding claim 28, Leung discloses the computer readable medium of claim 23, wherein steps (ii) and (iii) comprise receiving a multicast session, but does not disclose UMTS. Das

discloses a system with multicast handover that may be implemented in UMTS. (Paragraphs 0004, 0012) Therefore it would have bee obvious to one or ordinary skill in the art to implement a multicast handover method using UMTS, as UMTS is well known to be a developing standard that will support multimedia applications where multicast will be used.

Regarding claim 36, Leung discloses the method of claim 34, wherein steps (iii) and (v) comprise tuning to a multicast session, but does not disclose UMTS. Das discloses a system with multicast handover that may be implemented in UMTS. (Paragraphs 0004, 0012) Therefore it would have bee obvious to one or ordinary skill in the art to implement a multicast handover method using UMTS, as UMTS is well known to be a developing standard that will support multimedia applications where multicast will be used.

Regarding claim 42, Leung discloses the mobile terminal of claim 37, wherein steps (ii) and (iii) comprise wirelessly receiving a multicast session, but does not disclose UMTS. Das discloses a system with multicast handover that may be implemented in UMTS. (Paragraphs 0004, 0012) Therefore it would have bee obvious to one or ordinary skill in the art to implement a multicast handover method using UMTS, as UMTS is well known to be a developing standard that will support multimedia applications where multicast will be used.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis G. West whose telephone number is 571-272-7859. The examiner can normally be reached on Monday-Friday 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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